

Steve Flynn Liberty Bell Plaza, LLC 27555 Valley Center Road Valley Center, California 92082

January 29, 2020

RE: Biological Resource Letter Report for the proposed Liberty Bell Plaza (ENVIRONMENTAL LOG NO.: PDS2017-ER-17-08-010)

The following is a Biological Letter Report for a commercial project located east of Valley Center Road within the unincorporated community of Valley Center (County of San Diego).

#### **SUMMARY**

The proposed project involves the construction of a commercial center on eight existing parcels (Assessor Parcel Numbers (APN) APN: 189-012-17, 189-012-20, 189-012-21, 189-012-49, 189-091-08, 189-091-22, 189-091-30, and 189-091-35. Each of the parcels have been previously disturbed (cleared of native and/or naturalized habitat) and have been utilized for a variety of different land uses. Most recently (in 2017) two Planning and Development Services (PDS) stockpile permit were issued for APNs 189-01-217 and 189-09-130 (PDS2018-LDGRNA-00010 and 00011). These two parcels were also used in 2016 and 2017 (approximately 16-month duration) as a staging area/stock yard for a construction project.

The project is located within the Draft North County Multiple Species Conservation Program Subarea Plan (NC MSCP). The entire project site will be impacted by the proposed project, this includes 8.49 acres of developed lands. Project impacts to 8.49 acres of developed lands will not require habitat-based mitigation. Although the proposed project is proposing to modify and existing storm drain that is likely jurisdictional by the Regional Water Quality Control Board (RWQCB) and United States Army Corps of Engineers (USACE). Prior to project implementation consultation and or permits could be required by the RWQCB and USACE.

It should also be noted that two sensitive species were observed within the general vicinity of the project during the general biological survey (turkey vulture and western bluebird). However, no sensitive species (plant or wildlife) are anticipated to be directly impacted by the project. Although bird species do have the potential to nest on the ground and within the ornamental plantings that occur primarily along perimeter of the site. To avoid the direct loss of nest(s) protected under the Migratory Bird Treaty Act (MBTA) a pre-construction nesting survey will be required. If project brushing, clearing, grubbing, grading, or construction activities are proposed

within 500 feet of nesting raptor habitat and/or 300 feet of migratory bird nesting habitat during the migratory bird breeding season (January 15<sup>th</sup> through August 31<sup>st</sup>), a qualified County-approved biologist shall conduct a pre-construction survey no more than three days prior to the proposed activities to determine the presence/absence of nesting raptors and/or other migratory birds to ensure that active nests are not impacted. If active nest(s), are detected or breeding behavior observed no construction activities should occur until the young have fledged and are no longer returning to the nest(s), as determined by the project biologist. If no active nests are present or no breeding behavior observed construction activities may commence following concurrence by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) that the project will not directly or indirectly impact nesting migratory birds and/or raptors.

#### INTRODUCTION, PROJECT DESCRIPTION, LOCATION AND SETTING

#### **Project Description**

The proposed project includes the construction of 82,300 square feet (SF) of commercial use buildings (seven total structures) located on 8.49 acres. The development will include seven buildings, paved parking lot, landscaping and driveway aprons.

#### **Project Location**

The proposed project is located within the unincorporated portion of San Diego County in the community of Valley Center (Figure 1). The project is specifically located east of Valley Center Road (Figure 2). The project site is within the boundaries of the Draft North County Multiple Species Conservation Program Subarea Plan (NC MSCP). However, the project site is outside the Draft NC MSCP Pre-Approved Mitigation Area (PAMA).

### **Project Setting**

The site is currently composed of vacant land surrounded by existing commercial and residential properties. The site is bounded on the western side by Valley Center Road and the Woods Valley Ranch Golf Course occurs north and east of the site. Also, east of the site is a Valley Center Water District facility. Existing commercial (located adjacent to Valley Center Road) and residential buildings occur south of the site.

The study area is shown on the northwest portion of the Valley Center United States Geologic Service (USGS) 7.5-minute Quadrangle Map. The project location is east of Interstate 15, north of State Route 78, and south of State Route 76. The elevation slopes moderately from the northeastern boundary upslope to the southwestern boundary. The approximate elevation of the site is 1,300 feet above mean seas level.

Two soil types have been mapped on site and they include Clayey alluvial land (Co), and Visalia sandy loam (VaA) (Bowman 1973). Although all portions of the site show signs and evidence of disturbance including minor grading, disking, fill material import and soil compaction.

#### SITE SURVEY

Two general surveys of the site were conducted by Klutz Biological Consulting (KBC) in 2018. The first survey was conducted by Korey Klutz on April 15<sup>th</sup>, 2018 between 0820 and 1030. A second survey was conducted by Lindsay Willrick on May 31<sup>st</sup>, 2018, between 10:00a.m and 12:45a.m. A search of the California Natural Diversity Database (CNDDB) Valley Center 7.5' USGS Quadrangle was also conducted to identify sensitive species known to occur in the general vicinity of the project site.

The surveys were conducted by slowly walking meandering transects within, and around the project site where feasible, while recording all plant and wildlife species observed. Although the entire project area was surveyed, some sensitive resources may not have been detected due to the duration and season of the survey event. Rare annual plants may not have been apparent due to the seasonal timing of the surveys could have been outside the blooming season, and any wildlife species that are not active during the day (e.g. strictly nocturnal), that are secretive in their habits, or that use the site only periodically like during nesting may not have been detected during the survey.

Mapping was performed following the Biological Resource Mapping Guidelines within the Report Format and Content Requirements: Biological Resources (County 2010b). Wildlife was identified directly by sight or by vocalizations, and indirectly by scat, tracks, or burrows. Field notes were maintained throughout the surveys. The primary focus of the survey was to document and map the size, location, and general quality of all habitat types and the presence or potential presence of any sensitive resources (plant or wildlife) onsite.

Nomenclature for this report conforms to Jepson Flora Project (2018), for plants, Holland (1986) and Oberbauer (2008) for plant communities and habitat types, American Ornithologists' Union (AOU 1998 and 2004) for birds, Jennings (1983) and Stebbins (2003) for reptiles and amphibians, Baker (2003) for mammals, and Powell (1980) for insects.

#### **Biological Resources Present**

The site does not contain any native or naturalized habitats. Previous land uses on the proposed parcels have resulted in the clearing of vegetation and has also significantly altered the native soil structure.

## **Regional Context**

The project is located within the Draft NC MSCP and is outside of the Draft NC MSCP PAMA. Within the Draft NC MSCP the project site is located approximately 600 feet south of the currently proposed PAMA (Figure 3). Please note that the project is also adjacent to general open space that is associated with the Woods Valley Golf Course. Recently the golf course was purchased by a Native American tribe and now is considered Tribal Fee to Trust Land. Prior to the ownership change portions of the property (Moosa Creek) were part of the Preserve or the PAMA for the Draft NC MSCP.

As proposed, the project is consistent with the Draft NC MSCP and would not interfere or impact the County's ability to achieve the necessary conservation guidelines, nor would the project impact the Draft NC MSCP PAMA.

#### **Habitats and Vegetation Communities**

The following is a summary of the existing habitats and vegetation communities on the site. This section includes information on the habitat types, the dominant species present, and the habitat quality. Species abundance, composition, and diversity are discussed in terms of vegetative structure and wildlife, as well as the habitat sensitivity level and regional and local importance of conserving each habitat type. The study area (project site and 100-foot buffer) contain two distinct landcover types including urban/developed lands and disturbed lands (Figure 4). Each of these landcover types are discussed in more detail below and a complete list of botanical resources observed is provided in Appendix A.

### Urban/developed (Habitat Code: 12000)

Urban/developed lands refer to any built areas or ornamental vegetation that is maintained. Within the project site urban/developed lands include neighboring homes, active Valley Center Road, hardscape features, gravel/dirt roads, as wells as paved roads. Within this landcover type, ornamental vegetation occurs primarily along the perimeter of the study area. Species observed included Eucalyptus (Eucalyptus sp.) Mexican fan palm (Washingtonia robusta), Peruvian pepper tree (Schinus molle), citrus (Citrus ssp.), Western redbud (Cercis occidentalis), white mulberry (Morus alba), and macadamia nut (Macadamia integrifolia) (Figure 3).

## Disturbed Land (Habitat code: 113000)

Disturbed land includes areas in which the vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction from previously legal human activity; or where the vegetative cover is greater than 10 percent, there is soil surface disturbance and compaction, and the presence of building foundations and debris (e.g., irrigation piping, fencing, old wells, abandoned farming or mining equipment) resulting from legal activities (as opposed to illegal dumping). Vegetation on disturbed land (if present) will have a high predominance of non-native and/or weedy species that are indicators of surface disturbance and soil compaction, such as Russian thistle (Salsola tragus), telegraph weed (Heterotheca grandiflora), horehound (Marrubium vulgare), and sowthistle (Sonchus oleraceus). On-site disturbed lands occur throughout the project area and includes two dirt stockpiles, open bare ground which comprises more than 95% of the site and construction debris from past construction activities (Figure 3). Plant species were sparse throughout the site and only observed in small isolated patches. Weedy species were more common along the property boundaries within the buffer area (100-feet) from As detailed in the summary section of this letter the site in 2017 was the subject of two Planning and Development Services (PDS) stockpile permits (issued for APNs 189-01-217 and 189-09-130 (PDS2018-LDGRNA-00010 and 00011)). These two parcels were also used in 2016 and 2017 (approximately 16month duration) as a staging area/stock yard for another construction project (Valley Center Water District Project).

## **General Wildlife Observations**

The site survey detected the presence of five invertebrate species, and twenty bird species. All species observed are common in developed areas and a full compendium of species observed can be found in Appendix B. During the survey two San Diego County listed avian species were observed adjacent to the project site. Details of the observations and habitat assessments of each are detailed below in the Sensitive Wildlife section.

#### Special Status Species

Following is a summary of all sensitive species with potential to occur on the project site or on land immediately adjacent to the project area. Sensitive or special status plant and wildlife species and habitats are those that are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, susceptibility to human disturbance, degradation due to development or invasion by non-native species, or a combination of these factors.

The following were used in the determination of sensitive biological resources: U.S. Fish and Wildlife Service (USFWS; 2008, 2017); California Department of Fish and Game (CDFG; 2018a, 2018b, 2018c, 2018d), County Sensitive Plant and Animal list (County 2010a), California Native Plant Society (CNPS) online inventory (2018), and the California Natural Diversity Database (CNDDB; 2018).

#### **Sensitive Plants**

Four special status plant species were identified by the literature search as potentially occurring within the general project vicinity including Orcutt's Brodiaea (*Brodiaea orcuttii*), Robinson's peppergrass (*Lepidium virginicum var. robinsonii*), Rainbow manzanita (*Arctostaphylos rainbowensis*) and summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*). However, due to the disturbed nature of the site and the lack of suitable soils and hydrology none of these species were observed or are considered to have potential to occur on site (Attachment C). No additional plant species were identified in the County's scoping letter as potentially occurring onsite.

## Sensitive Wildlife

Sensitive or special status wildlife species and habitats are those that are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, or susceptibility to human disturbance, or a combination of these factors.

Species identified during the literature search as potentially occurring onsite included: southwestern pond turtle (*Actinemys pallida*), coast horned lizard (*Phrynosoma blainvillii*), orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), California gnatcatcher (*Polioptila californica californica*),

burrowing owl (Athene cunicularia), least Bell's Vireo (Vireo bellii pusillus). These species have the potential to occur because they have been previously identified in close proximity to the project site. However, due to the disturbed nature of the site, and the lack of suitable habitat none of the species were identified during the field survey and none of them are likely to occur on site (Attachment C). Attachment C also includes an analysis (potential presence/absence to occur on site) of northern Harrier a sensitive raptor that was identified in the County's scoping letter as having potential to occur onsite. No additional wildlife species were identified in the County's scoping letter as potentially occurring onsite.

During the field surveys two sensitive wildlife species were detected including Turkey Vulture and Western Bluebird. These species observation and their potential use of the site are detailed further below.

## Turkey Vulture San Diego County Group I

During the survey one turkey vulture (*Cathartes aura*) was observed flying over the site. The individual did not alight and appropriate habitat for roosting or nesting does not occur on the project site for this species.

#### Western Bluebird San Diego County Group II

A western bluebird (*Sialia mexicana*) pair was observed foraging across Valley Center Road within a patch of non-native grassland. The pair utilized fencing and powerlines for perching while sallying for insects over the project site, the pair eventually flew south and did not return during the survey period. Although the project site might provide foraging habitat for this species, no nest cavities were observed in adjacent ornamental trees or powerline poles during the time of the survey.

### Raptor Nesting and Foraging

Adjacent to the project site mature trees (primarily Eucalyptus along the perimeter of the study area) support potential raptor nesting sites. Raptors are large predatory or scavenging birds that typically require tall trees for perching and nesting associated with adjacent open grasslands to forage. Due to declining habitat and the associated declining numbers of these species overall, many raptor species have been designated as California Species of Special Concern by the CDFW. These species are protected, especially during their critical nesting and wintering stages. Raptors are protected under the CDFW California Raptor Protection Act (Title 14, Section 670).

One active red-tailed hawk (*Buteo jamaicensis*) nest was observed approximately 1,000 feet southwest of the project in a eucalyptus tree. Two adults were observed utilizing the large stick nest for perching and feeding two flighted fledglings. All four individuals were observed kettling in the project vicinity, while the two adults were observed soaring low over the project site exhibiting foraging behavior.

## Migratory Bird Treaty Act

On-site bird species have the potential to nest along the ground and within the ornamental plantings along the perimeter of the site. Active bird nests are protected under the Migratory

Bird Treaty Act (MBTA).

#### **Jurisdictional Wetlands and Waterways**

No jurisdictional wetlands occur within the study area. Although a drainage ditch (previously modified earthen channel) that does not contain any wetland/riparian vegetation does occurs along the southern portion of the project site (Figure 3). This feature would likely be regulated as "Waters" of State and "Waters" of the U.S as it connects to an existing culverted storm drain that eventually transport runoff downstream into Moosa Creak (Figure 2).

## **Other Unique Features/Resources**

### Wildlife Corridors and Linkages

No regional wildlife corridors or regional linkages occur within the project site or adjacent to the project site. The site is surrounded on all sides by existing development and is not likely to support or help facilitate wildlife movement either locally or regionally.

## **Topography/Connectivity**

As detailed in the project setting section, the project site flat and does not contain any unique topographic or unique connectivity areas.

#### SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

The study area is located within the County of San Diego's Draft NC MSCP but is outside of the PAMA. The impact analysis and associated mitigation requirements are consistent with the Draft NC MSCP.

#### **Vegetation Communities**

The proposed project would impact 8.49 acres of developed lands within the project site. Impacts to would not require mitigation (Table 1).

**Table 1. Project Impacts to Vegetation Communities** 

Habitat Type	Acres within the Project site (Acres)	Impacts within Project Footprint (Acres)	Mitigation Ratio	Mitigation Acreage
Disturbed\Developed Lands	8.49	8.49	NA	NA

#### Impacts to Special Status Species

Two special status species were observed during the survey, turkey vulture and western bluebird but they are not anticipated to be directly impacted by the project. Implementation of the also

project has the potential to impact nesting avian species. A preconstruction nesting bird survey will be required to ensure the project does not directly or indirectly impact MBTA bird species.

### Wildlife Corridors

The project will not impact any regional wildlife corridors or linkages.

## Impacts to Riparian Habitats and Sensitive Natural Communities

The study area does not contain any riparian habitat or sensitive natural communities. Impacts will not occur to riparian habitat or sensitive natural communities.

## Impacts to Local Plans, Ordinances and Adopted Plans

Based upon the County Guidelines for Determining Significance – Biological Resources (County 2010a), a significant impact related to local policies, ordinances and adopted plans would occur if the project would:

- Impact coastal sage scrub vegetation within lands outside of the MSCP more than the County's five-percent habitat loss threshold, or preclude connectivity between areas of high values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- Preclude or prevent the preparation of the subregional NCCP.
- Impact any amount of wetlands or sensitive habitat lands as outlined in the RPO.
- Not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
- Not conform with the goals and requirements, as outlined in any applicable Habitat Conservation Plan, Habitat Management Plan, Special Area Management Plan, Watershed Plan, or similar regional planning effort.
- Not minimize impacts to Biological Resources Core Areas (BRACs) within lands in the MSCP, as defined by the BMO.
- Not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- Reduce the likelihood of survival and recovery of listed species in the wild.
- Result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
- Reduce functional foraging habitat for raptors.
- Result in the take of eagles, eagle eggs or any part of an eagle (Bald Eagle Protection Act)

#### Preparation of a Subregional NCCP

The project site is within Draft NC MSCP but is located outside of the Draft PAMA. The project would not impact the preparation of a subregional Conservation Plan (NCCP). Therefore, no impact is identified for this threshold.

## Impact Wetlands or Sensitive Lands as Identified in the RPO

No wetlands or sensitive lands as identified in the Resource Protection Ordinance (RPO) exist onsite. The previously modified earthen drainage ditch that occurs onsite is not a resource that is projected by the RPO because it is man-made feature. Therefore, no impact is identified for this threshold.

#### Minimization/Mitigation of Coastal Sage Scrub Habitat Loss

The project site does not contain coastal sage scrub habitat. Habitats on the project site include urban/developed lands. Therefore, the project will not contribute to the loss of coastal sage scrub habitat or preclude connectivity between habitats of high value and no impact is identified related to this subthreshold.

# <u>Non-Conformance with HCP, HMP, Special Area Management Plan, Watershed Plan or Similar</u> Plan

There are no existing/approved County HCPs, HMPs, Special Area Management Plans, or Watershed Plans for the area, and therefore there are no impacts.

### Impacts to MSCP Narrow Endemic Species

No MSCP narrow endemic species have been identified within the project area and therefore there are no impacts.

## Reduce Survival and Recovery of Listed Species

No Listed Species have been identified within the project area and therefore there are no impacts.

## **Reduce Raptor Nesting and Foraging**

No impacts are anticipated to raptor nesting or foraging habitat.

#### **MBTA Species**

The proposed project will impact 8.49 acres of developed lands. No sensitive species will be directly impacted by the project, although MBTA bird species have the potential to nest onsite. To avoid the direct loss of nest(s) protected under the MBTA a pre-construction nesting survey will be required. If project brushing, clearing, grubbing, grading, or construction activities are proposed within 500 feet of nesting raptor habitat and/or 300 feet of migratory bird nesting habitat during the migratory bird breeding season (January 15<sup>th</sup> through August 31), a qualified County-approved biologist shall conduct a pre-construction survey no more than three days prior to the proposed activities to determine the presence/absence of nesting raptors and/or other migratory birds to ensure that active nests are not impacted. If active nest(s), are detected, no construction activities should occur until the young have fledged and are no longer returning to the nest(s), as determined by the project biologist. If no active nests are present, construction activities may commence following concurrence by the USFWS and CDFW that the project will not directly or indirectly impact nesting migratory birds and/or raptors.

#### Take of Eagles or Eagle Eggs

No golden eagles have been recorded in the project area and no nesting sites are known within 4000 feet of the project site. Thus, the project would not have an impact to eagles. No impact is identified for this subthreshold.

## **Cumulative Impacts**

The project will not result in any significant impacts to biological resources. Thus, the project would also not contribute to the cumulative loss of biological resources within the NC MSCP.

#### **MITIGATION**

Although no nests were observed, the project site contains potential nesting habitat for bird species protected under the MBTA. This represents a potentially significant impact. As a mitigation measure for this potential impact, if any construction work is proposed to occur during the County of San Diego raptor breeding season (January 15<sup>th</sup>— August 31<sup>st</sup>), a qualified County-approved biologist shall conduct a pre-construction survey no more than three days prior to the proposed activities to determine the presence/absence of nesting raptors and/or other migratory birds to ensure that active nests are not impacted. If active nest(s), are detected, no construction activities should occur until the young have fledged and are no longer returning to the nest(s), as determined by the project biologist. If no active nests are present, construction activities may commence following concurrence by the USFWS and CDFW that the project will not directly or indirectly impact nesting migratory birds and/or raptors.

Standard siltation and erosion control Best Management Practices (BMPs) will be implemented during construction, including boundary silt fencing, gravel bags, fiber rolls, weed-free straw wattles and mulch, and slope stabilization. The landscape plan will stipulate that project landscaping will not include exotic plant species listed on the California Invasive Plant Council's (Cal-IPC) "Invasive Plant Inventory" list.

### **REFERENCES REVIEWED AND/OR CITED**

- American Ornithologists' Union (AOU). 1998. *Checklist of North American Birds, 7th ed.* American Ornithologists' Union, Washington, D.C.
- AOU. 2004. Forty-fifth supplement to the American Ornithologists' Union Check-list of North American Birds. The Auk 121(3):985–995, 2004.
- Bowman, R. H. 1973. Soil Survey, San Diego Area, California, Part 1. United States Department of Agriculture. 104 pp. + appendices. Available online, accessed June 2018: https://www.nrcs.usda.gov/Internet/FSE\_MANUSCRIPTS/california/CA638/0/part1.pdf
- California Department of Fish and Wildlife (CDFG). 2018a. *Special Vascular Plants, Bryophytes, and Lichens List, April 2018*. Biogeographic Data Branch, California Natural Diversity Database. Quarterly publication. 127 pp.

- CDFG. 2018b. California Department of Fish and Game. State and Federally Listed Endangered, Threatened and Rare Plants of California, April 2018. Biogeographic Data Branch, California Natural Diversity Database. 7 pp.
- CDFG. 2018c. *Special Animals List, April 2018*. Biogeographic Data Branch, California Natural Diversity Database. Periodic publication. 66 pp.
- CDFG. 2018d. State and Federally Listed Endangered and Threatened Animals of California, May 2018. Biogeographic Data Branch, California Natural Diversity Database. Quarterly publication. 14 pp.
- CNDDB. 2018. Biogeographic Data Branch. Biogeographic Data Branch, California Natural Diversity Database. Sacramento, CA. http://www.dfg.ca.gov/biogeodata/cnddb/rf\_ftpinfo.asp
- California Native Plant Society (CNPS). 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Rare Plant Program. Accessed June 2018. http://www.rareplants.cnps.org.
- County of San Diego (County). 2010a. County of San Diego Guidelines for Determining Significance: Biological Resources. Department of Planning and Land Use, September 15, 2010.
- County. 2010b. County of San Diego Report Format and Content Requirements: Biological Resources. Department of Planning and Land Use, September 15, 2010.
- Jepson Flora Project (eds.) 2018. *Jepson eFlora*. Accessed on June 18, 2018. http://ucjeps.berkeley.edu/eflora/
- Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Non-game Heritage Program, State of California Department of Fish and Game, Sacramento, CA. 157 pp.
- Baker, R.J., et al. 2003. *Revised Checklist of North American Mammals North of Mexico, 2003*. Occasional Papers The Museum Texas Tech. University. Number 229. December 1, 2003.
- Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge. March 2008. *Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California"*, Robert F. Holland, Ph.D., October 1986.
- Powell J.A., Hogue C.L. 1980. *California Insects*. University of California Press. 400 pp.
- Stebbins, R. C. 2003. Field Guide to Western Reptiles and Amphibians, Third Edition. Houghton

Mifflin Co., Boston, Massachusetts.

- USFWS. 2008. *Birds of Conservation Concern 2008*. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. Accessed June 2018: https://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf.
- U.S. Fish and Wildlife Service (USFWS). 2017. U.S. Endangered, Threatened and Candidate Plant and Animal Species by State and Lead Region. U.S. Department of the Interior. United States Fish and Wildlife Service Threatened and Endangered Species System (TESS), 2017. https://my.usgs.gov/confluence/pages/viewpage.action?pageId=518426757.

# **Preparer and Persons/Organizations Contacted**

Prepared by:

Korey Klutz, County Approved Biologist

Honey Hlate

**ATTACHMENTS:** 

Figure 1 Regional Vicinity

Figure 2 Project Vicinity

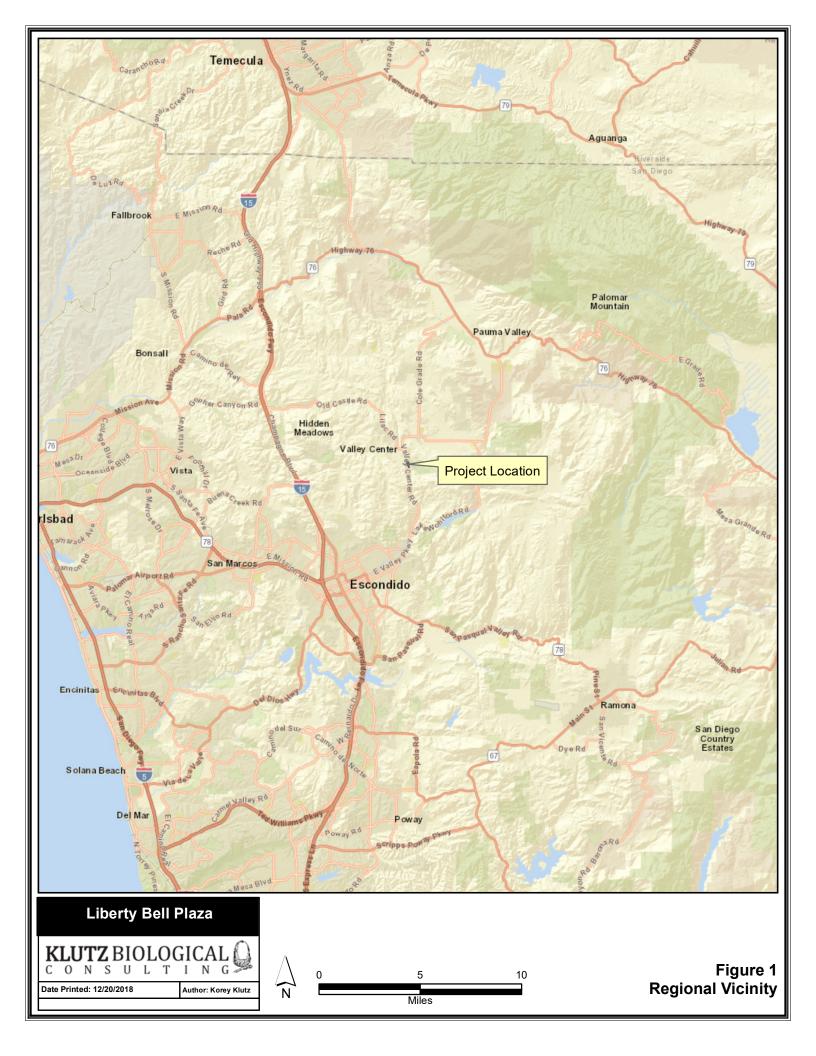
Figure 3 Biological Resources

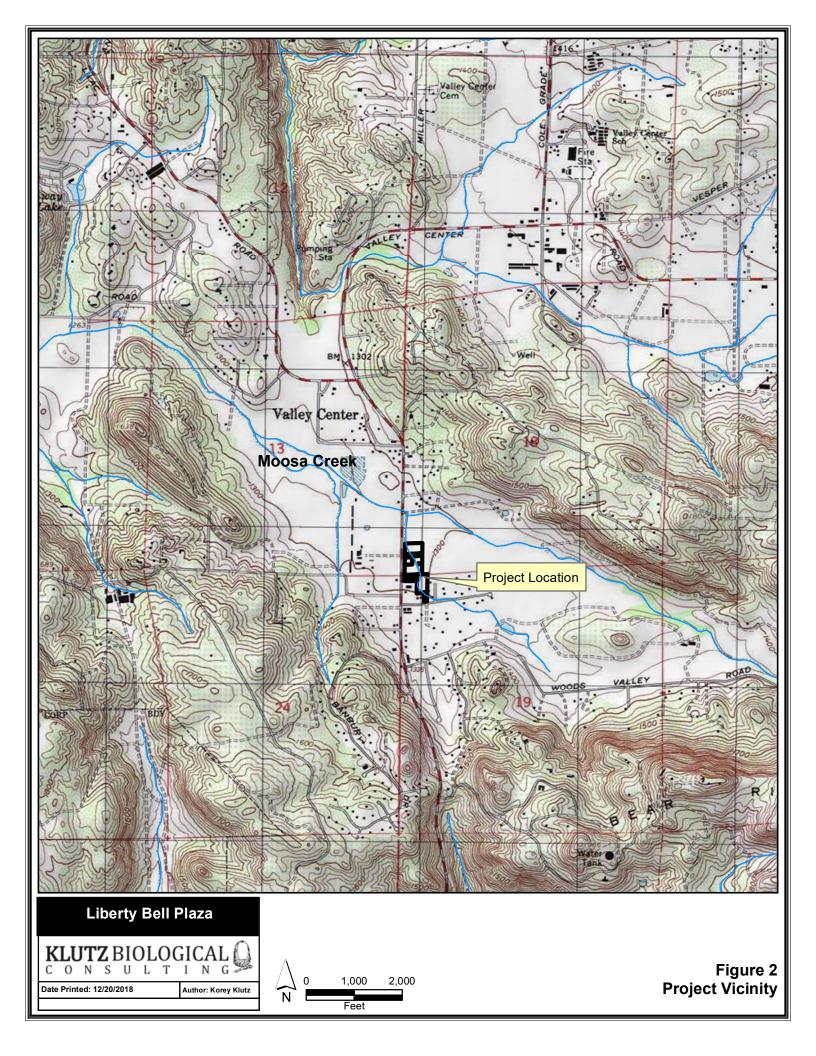
Figure 4 Project Impacts

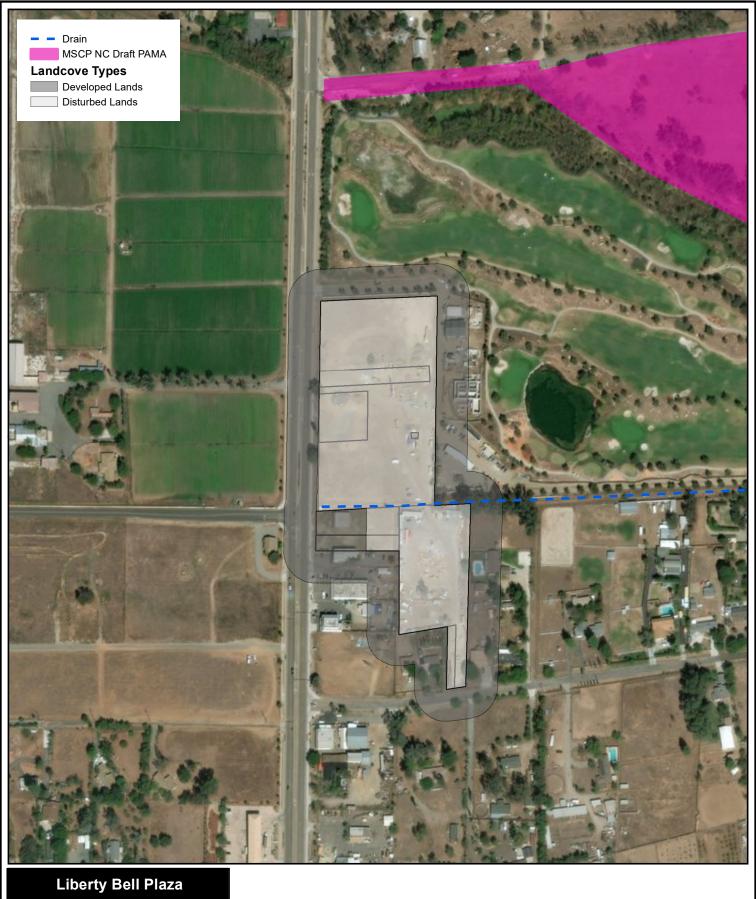
Appendix A Observed Species List - Flora

Appendix B Observed Species List - Fauna

Appendix C Special Status Species with Potential to Occur







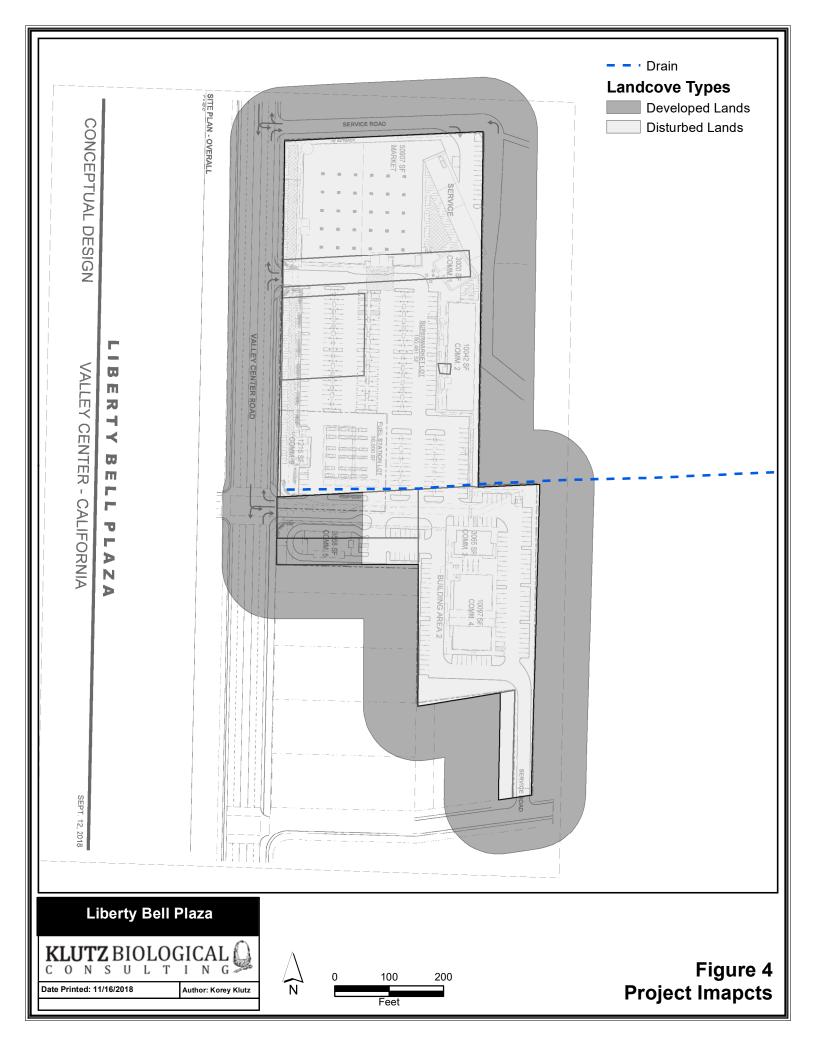


Date Printed: 12/20/2018 Author: Korey Klutz

 $\bigwedge_{\mathbf{N}}$ 



Figure 3 Biological Resources



**Scientific Name Common Name Special Status EUDICOTS** Amaranthaceae - Amaranth family \*Amaranthus albus Tumbleweed **Anacardiaceae - Sumac Or Cashew family** \*Schinus molle Pepper tree **Asteraceae - Sunflower family** \*Ambrosia artemisiifolia Common ragweed \*Logfia gallica Daggerleaf cottonrose **Boraginaceae - Borage family** small-flowered fiddleneck Amsinckia menziesii Heliotropium curassavicum var. oculatum Alkali heliotrope **Brassicaceae - Mustard family** Black mustard \*Brassica nigra \*Brassica tournefortii Asian mustard \*Capsella bursa-pastoris Shepherd's purse \*Sisymbrium irio London rocket Caryophyllaceae - Pink family \*Polycarpon tetraphyllum var. tetraphyllum Four-leaved allseed \*Spergularia rubra Red sand-spurrey **Chenopodiaceae - Goosefoot family** Chenopodium album Goosefoot \*Salsola tragus Russian thistle Convolvulaceae - Morning-glory family Field bindweed \*Convolvulus arvensis **Euphorbiaceae - Spurge family** Dove weed Croton setiger Fabaceae - Legume family American bird's foot trefoil Acmispon americanus var. americanus Cercis occidentalis Western redbud California burclover \*Medicago polymorpha Fagaceae - Oak family Quercus agrifolia Coast live oak \*Quercus suber Cork oak **Geraniaceae - Geranium family** \*Erodium cicutarium Redstem filaree \*Erodium moschatum Greenstem filaree Malvaceae - Mallow family \*Malva neglecta **Dwarf mallow** \*Malva parviflora Cheeseweed, little mallow **Moraceae - Mulberry family** \*Morus alba White mulberry Plantaginaceae - Plantain family \*Kickxia elatine Sharpleaf cancerwort

English plantain

\*Plantago lanceolata

# **Appendix A: Observed Species List - Flora**

Polygonaceae - Buckwheat family

\*Polygonum aviculare Knotweed, knotgrass

**Proteaceae - Protea family** 

\*Macadamia integrifolia Macadamia nut

Salicaceae - Willow family

Salix sp. Willow

**Tamaricaceae - Tamarisk family** 

\*Tamarix chinensis Fivestamen tamarisk

**Zygophyllaceae - Caltrop family** 

\*Tribulus terrestris Puncturevine

**MONOCOTS** 

Arecaceae - Palm family

\*Washingtonia robusta Mexican fan palm

Poaceae - Grass family

\*Avena fatua Wild oat

\*Avena sativa Cultivated oat
\*Bromus diandrus Ripgut grass
\*Cynodon dactylon Bermuda grass

\*Festuca rigida Rigid italian rye grass

Appendix B: Observed Species List - Fauna

Scientific Name	cientific Name Common Name		Habitat Observed
INVERTEBRATES			
Insects			
Pogonomyrmex ssp.	Harvester Ant	None, Visual	U/D
*Apis mellifera	Honey Bee	None, Visual	U/D
Moths, Skippers and Butter	flies		
Icaricia acmon	Acmon Blue	None, Visual	U/D
Vanessa annabella	West Coast Lady	None, Visual	U/D
Pyrgus albescens	White Checkered-skipper	None, Visual	U/D
VERTEBRATES			
Reptiles			
Sceloporus occidentalis Birds	Western Fence Lizard	None, Visual	U/D
Cathartes aura	Turkey Vulture	SD County Group I, Visual	Flyover
Buteo jamaicensis	Red-tailed Hawk	None, Visual	U/D
Zenaida macroura	Mourning Dove	None, Visual	U/D
Aeronautes saxatalis	White-throated Swift	None, Aural	Flyover
Melanerpes formicivorus	Acorn Woodpecker	None, Aural	Flyover
Picoides nuttallii	Nuttall's Woodpecker	None, Aural	Flyover
Colaptes auratus	Northern Flicker	None, Aural	Flyover
Empidonax difficilis	Pacific-slope Flycatcher	None, Aural	Flyover
Tyrannus vociferans	Cassin's Kingbird	None, Visual	NNG
Aphelocoma californica	California Scrub-Jay	None, Aural	Flyover
Petrochelidon pyrrhonota	Cliff Swallow	None, Visual	U/D
Sialia mexicana	Western Bluebird	SD County Group II,	U/D
		MSCP, Visual	•
Mimus polyglottos	Northern Mockingbird	None, Visual	U/D
*Sturnus vulgaris	European Starling	None, Visual	U/D
Phainopepla nitens	Phainopepla	None, Visual	Flyover
Pipilo maculatus	Spotted Towhee	None, Aural	Flyover
*Molothrus ater	Brown-headed Cowbird	None, Aural	Flyover
Icterus cucullatus	Hooded Oriole	None, Visual	Flyover
Carpodacus mexicanus	House Finch	None, Visual	U/D
Carduelis psaltria	Lesser Goldfinch	None, Visual	U/D
Mammals			
Sylvilagus audubonii	Desert Cottontail	None, Visual	U/D
Otospermophilus beecheyi	California Ground Squirrel		U/D
Thomomys bottae	Botta's Pocket Gopher	None, Burrow	U/D
Canis latrans	Coyote	None, Scat	U/D

Urban/Developed = U/D

# ATTACHMENT C SPECIAL STATUS SPECIES ANALYSIS

# Plant Species – Special Status Literature Search and County Scoping Letter Analysis of Potential to Occur

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
LYCOPHYTES					
Selaginellaceae - Spike-moss family					
Ashy spike-moss	Selaginella cinerascens	CRPR 4.1	County List D	Perennial rhizomatous fern. Chaparral and undisturbed coastal sage scrub; 65–2,099 ft. Sporophyte period: Variable	Not detected, suitable habitat does not occur on site.
FERNS					
Ophioglossaceae - Adder's-tongue family					
California adder's- tongue	Ophioglossum californicum	CRPR 4.2	County List D	Perennial rhizomatous herb. Mesic areas in chaparral, grasslands, and the margins of vernal pools; 196–1,722 ft. Blooming period: December–June	Not detected, suitable mesic habitat does not occur on site.
EUDICOTS					
Apiaceae - Carrot family					
San Diego button- celery	Eryngium aristulatum var. parishii	FE, SE, CRPR 1B.1	County List A	Annual/perennial herb. Mesic soils in coastal scrub, grassland, and vernal pools; 65–2,034 ft. Blooming period: April–June	Not detected, suitable mesic habitat does not occur on site.
Asteraceae - Sunflower family					

Common Name	Scientific Name	Special Status	County	Habitat Requirements	PTO
San Diego ambrosia	Ambrosia pumila	FE, CRPR 1B.1	County List A	Rhizomatous herb. Sandy loam or clay soils in chaparral, coastal sage scrub, grassland, vernal pools; often in disturbed areas. Sometimes alkaline areas, creek beds, seasonally dry drainages, or floodplains; 66–1,362 ft. Blooming period: April–October	Not detected, suitable habitat does not occur on site.
San Diego sagewort	Artemisia palmeri	CRPR 4.2	County List D	Deciduous shrub. Sandy soils in mesic areas in chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; 49–3,002 ft. Blooming period: February–September	Not detected, suitable habitat does not occur on site.
Encinitas baccharis	Baccharis vanessae	FT, SE, CRPR 1B.1	County List A	Deciduous shrub. Sandstone in maritime chaparral and Cismontane woodland; 196–2,362 ft. Blooming period: August–November	Not detected, suitable habitat does not occur on site.
San Diego County sunflower	Bahiopsis laciniata	CRPR 4.2	County List D	Shrub. Chaparral and coastal scrub; 33–2,461 ft. Blooming period: February–August	Not detected, suitable habitat does not occur on site.
Southern tarplant	Centromadia parryi ssp. australis	CRPR 1B.1	County List A	Annual herb. Found within the margin of marshes and swamps, vernally mesic soils in grassland, and vernal pools; 0–1,574 ft. Blooming period: May–November	Not detected, suitable mesic habitat does not occur on site.
Smooth tarplant	Centromadia pungens ssp. laevis	CRPR 1B.1	County List A	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and grassland; 0–2,100 ft. Blooming period: April–September	Not detected, suitable (low) habitat does occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Palmer's goldenbush	Ericameria palmeri var. palmeri	CRPR 1B.1	County List B	Evergreen shrub. Coastal drainages, in mesic chaparral sites, or rarely in coastal sage scrub; 0–1,969 ft. Blooming period: August–October	Not detected, suitable mesic habitat does not occur on site.
Graceful tarplant	Holocarpha virgata ssp. elongata	CRPR 4.2	County List D	Annual herb. Chaparral, cismontane woodland, coastal scrub, and grassland; 196–3,600 ft. Blooming period: May–November	Not detected, suitable (low) habitat does occur on site.
Gander's ragwort	Packera ganderi	SR, CRPR 1B.2	County List A	Perennial herb. Chaparral often in burned areas and gabbroic outcrops; 1,312–3,937 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
Golden-rayed pentachaeta	Pentachaeta aurea ssp. aurea	CRPR 4.2	County List D	Annual herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and grassland; 262–6,068 ft. Blooming period: March–July	Not detected, suitable (low) habitat does occur on site.
Rush-like bristleweed	Xanthisma junceum	CRPR 4.3	County List D	Perennial herb. Chaparral and coastal scrub; 787–3,280 ft. Blooming period: June–January	Not detected, suitable habitat does not occur on site.
Boraginaceae - Borage family					
Palmer's grapplinghook	Harpagonella palmeri	CRPR 4.2	County List D	Annual herb. Clay soils in chaparral, grasslands, coastal sage scrub; 65–3,132 ft. Blooming period: March–May	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Brassicaceae - Mustard family					
San Diego wild cabbage	Caulanthus heterophyllus	none	none	Annual herb. Dry areas in openings in coastal sage scrub and chaparral; 0–4,600 ft. Blooming period: March–May	Not detected, suitable habitat does not occur on site.
Robinson pepperweed	Lepidium virginicum ssp. robinsonii	CRPR 4.3	County List A	Annual herb. Openings in chaparral and sage scrub; below 2,900 ft. Blooming period: January–July	Not detected, suitable habitat does not occur on site.
Hammitt's clay- cress	Sibaropsis hammittii	CRPR 1B.2	County List A	Annual herb. Clay soils in openings in chaparral and grassland, known to Viejas Mtn.; 2,362–3,501 ft. Blooming period: March–April	Not detected, suitable habitat does not occur on site.
Campanulaceae - Bellflower family					
Mission canyon bluecup	Githopsis diffusa ssp. filicaulis	CRPR 3.1	County List C	Annual herb. Mesic soils and disturbed areas within chaparral; 1,476–2,296 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
Chenopodiaceae - Goosefoot family					
Parish's brittlescale	Atriplex parishii	CRPR 1B.1	County List A	Annual herb. Alkaline soils in chenopod scrub, playas, and vernal pools; 82–6,232 ft. Blooming period: June–October	Not detected, suitable habitat does not occur on site.
Convolvulaceae - Morning-glory family					

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Western dichondra	Dichondra occidentalis	CRPR 4.2	County List D	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, grassland; 164–1,640 ft. Blooming period: January–July	Not detected, suitable (low) habitat does occur on site.
Crassulaceae - Stonecrop family					
Variegated dudleya	Dudleya variegata	CRPR 1B.2	County List A	Perennial herb. Clay soils in chaparral, cismontane woodland, coastal scrub, grassland, and vernal pools; 9–1,903 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
Sticky dudleya	Dudleya viscida	CRPR 1B.2	County List A	Perennial herb. Rocky soils in coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub; 32–1,804 ft. Blooming period: May–June	Not detected, suitable habitat does not occur on site.
Ericaceae - Heath family					
Rainbow manzanita	Arctostaphylos rainbowensis	CRPR 1B.1	County List A	Evergreen shrub. Chaparral; 672–2,198 ft. Blooming period: December–March	Not detected, suitable habitat does not occur on site.
Summer holly	Comarostaphylis diversifolia ssp. diversifolia	CRPR 1B.2	County List A	Evergreen shrub. Chaparral and cismontane woodland; 98–2,591 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
Fagaceae - Oak family					

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Engelmann oak	Quercus engelmannii	CRPR 4.2	County List D	Deciduous tree. Cismontane woodland, chaparral, riparian woodland, and grassland; 164–4,265 ft. Blooming period: March–June	Not detected, suitable habitat does not occur on site.
Geraniaceae - Geranium family					
Round-leaved filaree	California macrophylla	none	County List B	Annual herb. Valley grassland, foothill woodland, open sites, vertic clay, occasionally serpentine; 0—3,900 ft. Blooming period: March–May	Not detected, suitable habitat does not occur on site.
Lamiaceae - Mint family					
San Diego thorn- mint	Acanthomintha ilicifolia	FT, SE, CRPR 1B.1	County List A	Annual herb. Friable or broken clay soils in grassy openings in chaparral and coastal sage scrub, grassland, and vernal pools; 33–3,150 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
San Miguel savory	Clinopodium chandleri	CRPR 1B.2	County List A	Perennial shrub. Rocky gabbroic, or metavolcanic areas in chaparral, cismontane woodland, coastal scrub, riparian scrub, and grassland; 393–3,526 ft. Blooming period: March–July (synonym of Satureja chandleri)	Not detected, suitable habitat does not occur on site.
Heart-leaved pitcher sage	Lepechinia cardiophylla	CRPR 1B.2	County List A	Perennial shrub. Closed-cone coniferous forest, chaparral, and cismontane woodland; 1,705–4,493 ft. Blooming period: April–July	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Felt-leaved monardella	Monardella hypoleuca ssp. lanata	CRPR 1B.2	County List A	Rhizomatous herb. Chaparral and cismontane woodland; 984–5,040 ft. Blooming period: June– August	Not detected, suitable habitat does not occur on site.
Southern mountains skullcap	Scutellaria bolanderi ssp. austromontana	CRPR 1B.2	County List A	Perennial rhizomatous herb. Mesic embankments of montane creeks, mesic chaparral, mesic cismontane woodland, and mesic lower montane coniferous forest; 1,394–6,562 ft. Blooming period: June–August	Not detected, suitable habitat does not occur on site.
Onagraceae - Evening Primrose family					
Delicate clarkia	Clarkia delicata	CRPR 1B.2	County List A	Annual herb. Chaparral, foothill woodland; 0–3,200 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
Picrodendraceae - Bitter-Tree family					
Parry's tetracoccus	Tetracoccus dioicus	CRPR 1B.2	County List A	Deciduous shrub. chaparral and coastal sage scrub; 541–3,280 ft. Blooming period: April–May	Not detected, suitable habitat does not occur on site.
Polemoniaceae - Phlox family					
Spreading navarretia	Navarretia fossalis	FT, CRPR 1B.1	County List A	Annual herb. Chenopod scrub, assorted freshwater marshes and swamps, playas, and vernal pools; 98–2,149 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Caraway-leaved woodland-gilia	Saltugilia caruifolia	CRPR 4.3	County List D	Annual herb. Sandy openings in chaparral and lower montane coniferous forest; 2,755–7,544 ft. Blooming period: May–August	Not detected, suitable elevation does not occur on site.
Polygalaceae - Milkwort family					
Fish's milkwort	Polygala cornuta var. fishiae	CRPR 4.3	County List D	Deciduous shrub. Chaparral, cismontane woodland, and riparian woodland; 328–3,280 ft. Blooming period: May–August	Not detected, suitable habitat does not occur on site.
Polygonaceae - Buckwheat family					
Peninsular spineflower	Chorizanthe leptotheca	CRPR 4.2	County List D	Annual herb. Alluvial fans or granitic areas in chaparral, coastal scrub, and lower montane coniferous forest; 984–6,232 ft. Blooming period: May–August	Not detected, suitable habitat does not occur on site.
Prostrate spineflower	Chorizanthe procumbens	None	None	Annual herb. Sandy or gravelly soils; 0–4,260 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.
Rhamnaceae - Buckthorn family					
Lakeside ceanothus	Ceanothus cyaneus	CRPR 1B.2	County List A	Evergreen shrub. Closed-cone coniferous forest, dense chaparral; 771–2,543 ft. Blooming period: April–June	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Wart-stemmed ceanothus	Ceanothus verrucosus	CRPR 2.2	County List B	Evergreen shrub. Chaparral; 3–1,247 ft. Blooming period: December–May	Not detected, suitable habitat does not occur on site.
Rosaceae - Rose family					
Southern mountain misery	Chamaebatia australis	CRPR 4.2	County List D	Shrub. Chaparral and dry slopes; 980–4,000 ft. Blooming period: November–May	Not detected, suitable habitat does not occur on site.
Ramona horkelia	Horkelia truncata	CRPR 1B.3	County List A	Perennial herb. Clay and gabbroic soils in chaparral and cismontane woodland; 1,312–4,265 ft. Blooming period: May–June	Not detected, suitable habitat does not occur on site.
MONOCOTS					
Juncaceae - Rush family					
Southwestern spiny rush	Juncus acutus ssp. leopoldii	CRPR 4.2	County List D	Perennial rhizomatous herb. Mesic soils in coastal dunes, alkaline seeps in meadows and seeps, and coastal salt marshes and swamps; 9–2,953 ft. Blooming period: (March)May–June	Not detected, suitable habitat does not occur on site.
Orchidaceae - Orchid family					
Chaparral rein orchid	Piperia cooperi	CRPR 4.2	County List D	Perennial herb. Chaparral, cismontane woodland, and grassland; 49–5,200 ft. Blooming period: March–June	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Narrow-petaled rein orchid	Piperia leptopetala	CRPR 4.3	County List D	Perennial herb. Cismontane woodland, lower and upper montane coniferous forest; 1,246–7,298 ft. Blooming period: May–July	Not detected, suitable habitat does not occur on site.
Poaceae - Grass family					
Vernal barley	Hordeum intercedens	CRPR 3.2	County List C	Annual herb. Coastal dunes, coastal scrub, saline flats and depressions in grassland, and vernal pools; 16–3,280 ft. Blooming period: March–June	Not detected, suitable habitat does not occur on site.
San Diego County needle grass	Stipa diegoensis	CRPR 4.2	County List D	Perennial herb. Rocky, often mesic soils within chaparral and coastal scrub; 32–2,624 ft. Blooming period: February–June	Not detected, suitable habitat does not occur on site.
Ruscaceae - Butcher's-Broom family					
Chaparral nolina	Nolina cismontana	CRPR 1B.2	County List A	Evergreen shrub. Sandstone and gabbro soils in chaparral, and coastal scrub; 459–4,183 ft. Blooming period: May–July	Not detected, suitable habitat does not occur on site.
Themidaceae - Brodiaea family					
San Diego goldenstar	Bloomeria clevelandii	CRPR 1B.1	County List A	Perennial bulbiferous herb. Clay soils in chaparral, coastal sage scrub, valley grasslands, and vernal pools; 164–1,526 ft. Blooming period: April–May	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Orcutt's brodiaea	Brodiaea orcuttii	CRPR 1B.1	County List A; CRPR 1B.1	Perennial bulbiferous herb. Found on mesic, clay, sometimes serpentinite soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, grassland, and vernal pools within mesic areas on clay and sometimes serpentine soils; 98–5,550 ft. Blooming period: May–July	Not detected, suitable mesic conditions do not occur on site.

# Wildlife Species – Special Status Literature Search and County Scoping Letter Analysis of Potential to Occur

Common Name	Scientific Name	Special Status	County	Habitat Requirements	PTO
INVERTEBRATES					
Branchiopods					
San Diego Fairy Shrimp	Branchinecta sandiegonensis	FE	SDC Group I, NE	Small, shallow vernal pools. Occasionally occur in ditches and road ruts with suitable conditions. Have never been found in permanent water bodies.	Not detected, suitable habitat does not occur on site.
Moths, Skippers	and Butterflies				
Hermes Copper	Lycaena hermes	FC	SDC Group I	Endemic to San Diego County, west of the Peninsular mountain ranges. Host plant is <i>Rhamnus crocea</i> .	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Quino Checkerspot	Euphydryas editha quino	FE	SDC Group I	Inhabit grasslands, juniper woodland, vernal pools, meadows, lake margins, and open scrub and chaparral communities. Host plants include <i>Plantago erecta</i> , <i>P. patagonica</i> ,  Antirrhinum coulterianum, Cordylanthus rigidus, and/or Castilleja exserta.	Not detected, suitable habitat does not occur on site. The project site is outside the known range of this species.
Monarch	Danaus plexippus	Status under review	SDC Group II	Typically overwinter in wind-protected groves of <i>Eucalyptus</i> sp., <i>Pinus radiata</i> , or <i>Hesperocyparis macrocarpa</i> along the California coast with nectar and water sources nearby. In San Diego County monarch can occur along the coast where they cluster in eucalyptus groves. Host plants include Asclepias spp.	Not detected, suitable habitat does not occur on site.
Harbison's Dun Skipper	Euphyes vestris harbisoni		SDC Group II	Known only from San Diego County and southern Orange County Single larval host plant includes <i>Carex spissa</i> which is often associated with riparian oak woodlands.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО		
VERTEBRATES							
Fish							
Arroyo Chub	Gila orcutti	CSC	SDC Group I	Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita Rivers, as well as Malibu and San Juan Creeks. Inhabits southern coastal streams characterized by slow-moving water, mud or sand substrate, and depths greater than 40 cm. Have also been found in pool habitats with gravel, cobble and boulder substrates. Adapted to survive in low oxygen waters and wide temperature fluctuations.	Not detected, suitable habitat does not occur on site.		
Amphibians							
Large-blotched Ensatina	Ensatina eschscholtzii klauberi		SDC Group I	Oak woodland, pine woodland, coniferous forests, and shrublands from 1,700-5,400 ft. Woody debris is a key habitat component	Not detected, suitable habitat does not occur on site.		
Arroyo Toad	Anaxyrus californicus	FE, CSC	SDC Group I	Breeds in slow moving streams with sandy shallow pools with nearby sandbars and adjacent stream terraces. Inhabit upland habitats when not breeding, such as sycamore-cottonwood woodlands, oak woodlands, coastal sage scrub, chaparral and grassland from 984-3,280 ft	Not detected, suitable habitat does not occur on site.		

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Western Spadefoot	Spea hammondii	CSC	SDC Group II	Breeding habitat includes turbid pools with little to no cover such as vernal pools or other ephemerally ponded areas, pools in ephemeral streams, and cattle tanks. Upland habitat includes open areas with sandy/gravelly soils among mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains from sea level to 4,500 ft. Rain pools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Not detected, suitable habitat does not occur on site.
California Red- Legged Frog	Rana draytonii	FT, CSC	SDC Group I	Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges. Breeding habitat includes permanent or ephemeral water sources such as lakes, ponds, reservoirs, and slow streams. Upland habitat includes ponds/streams in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover in lowlands or foothills from sea level to 5,000 ft.	Not detected, suitable habitat does not occur on site. The project site is outside the known range of this species.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Southwestern Pond Turtle	Actinemys pallida	CSC	SDC Group I, NE	Inhabits slack- or slow-water aquatic habitat with basking sites, located in woodland, forest, and grasslands. This species is primarily aquatic and only moves to nearby adjacent areas for egg laying from sea level to approximately 6,600 ft.	Not detected, suitable habitat does not occur on site.
Reptiles					
San Diego Banded Gecko	Coleonyx variegatus abbottii	CSC	SDC Group I	Prefers rocky areas in coastal sage and chaparral. Breeding occurs during April and May and females lay one or two eggs between May and September. This species hibernates through the winter (generally November to February).	Not detected, suitable habitat does not occur on site.
Southern California Legless Lizard	Anniella stebbinsi	CSC	SDC Group II	Occurs in mesic loose soils with sparsely vegetated areas of beach dunes, chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces. Lives mostly underground or in leaf litter for cover, foraging habitat includes loose soil, sand, and leaf litter where it will ambush prey.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Blainville's Horned Lizard	Phrynosoma blainvillii	CSC	SDC Group II	Prefers open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains from sea level to 8,000 ft; requires abundant ant colonies for foraging.	Not detected, suitable habitat does not occur on site.
Coronado Skink	Plestiodon skiltonianus interparietalis	WL	SDC Group II	Occurs in grassland, woodlands, coniferous forests, chaparral, coastal sage scrub, and especially in open sunny areas such as clearings and the edges of creeks and rivers. This species prefers rocky areas near streams with dense vegetation cover, and can also be found in areas away from water.	Not detected, suitable habitat does not occur on site.
Belding's Orange- throated Whiptail	Aspidoscelis hyperythra beldingi	WL	SDC Group II	Floodplains or terraces along streams and in low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Closely tied to coastal sage scrub and chaparral habitats from sea level to 2,000 ft.	Not detected, suitable habitat does not occur on site.
San Diegan Tiger Whiptail	Aspidoscelis tigris stejnegeri	CSC	SDC Group II	Found in arid and semiarid desert to open woodlands where the vegetation is sparse to allow for greater mobility (running) from sea level to 6,986 ft.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	PTO
Coastal Rosy Boa	Lichanura trivirgata roseofusca	None	SDC Group II	Typically occurs in rocky areas in coastal sage scrub, chaparral, and desert scrub. Often associated with riparian areas, although does not require permanent water source.	Not detected, suitable habitat does not occur on site.
Coast Patch- Nosed Snake	Salvadora hexalepis virgultea	CSC	SDC Group II	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains at elevations from below sea level to around 7,000 ft.	Not detected, suitable habitat does not occur on site.
Two-striped Garter Snake	Thamnophis hammondii	CSC	SDC Group I	Species is highly aquatic and is found around pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brushland and coniferous forest. Associated with permanent and semi-permanent water bordered by dense vegetation in a variety of habitats from sea level to 8,000 ft.	Not detected, suitable habitat does not occur on site.
South Coast Common Garter Snake	Thamnophis sirtalis ssp. infernalis	CSC	SDC Group II	Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 8,000 ft. Marsh and upland habitats near permanent water with riparian vegetation.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Red Diamond Rattlesnake	Crotalus ruber	CSC	SDC Group II	Inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland and cultivated areas. Prefers rocky areas with dense vegetation from Southern California to Baja California, Mexico.	Not detected, suitable habitat does not occur on site.
San Diego Ringneck Snake	Diadophis punctatus similis	None	SDC Group II	Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands	Not detected, suitable habitat does not occur on site.
Birds					
Canada Goose	Branta canadensis	None	SDC Group II	Prefer habitats with unobstructed views near water, grassy fields, and grain fields. Often abundant in areas with extensive lawns such as parks, golf courses, and airports.	Not detected, suitable habitat does not occur on site.
Great Blue Heron	Ardea herodias	None	SDC Group II	A large wading bird that can be found in freshwater and saltwater habitat, also utilizes grassland and agricultural fields to forage for small mammals. Breeding colonies can be located within two to four miles of feeding areas.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Turkey Vulture	Cathartes aura	None	SDC Group I	Open areas including mixed farmland, forest, and rangeland, especially within a few miles of rocky or wooded areas. Rocky outcroppings, cliffs, and dry forests provide nesting sites, while open areas act as foraging habitat.	Detected flying over site.
White-tailed Kite	Elanus leucurus	CFP	SDC Group I	Occurs in herbaceous and open stages of valley lowland habitats, usually near agricultural land. Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Typically nest in the upper third of trees that may be 10–160 ft. tall. These can be open-country trees growing in isolation, or at the edge of or within a forest.	Not detected, Suitable foraging habitat occurs onsite.
Northern Harrier	Circus hudsonius	CSC	SDC Group I	Nest on the ground in patches of dense, tall vegetation in undisturbed areas. Breed and forage in variety of open habitats such as marshes, wet meadows, weedy borders of lakes, rivers and steams, grasslands, pastures, croplands, sagebrush flats and desert sinks.	Not detected, Suitable foraging habitat occurs onsite.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Sharp-shinned Hawk	Accipiter striatus	WL	SDC Group I	A fairly common migrant and winter resident in San Diego. Breeds in young coniferous forests with high canopies. During winter this species utilizes forest edges and somewhat open habitats for foraging as well as suburban areas with bird feeders.	Not detected, Suitable foraging habitat occurs onsite.
Cooper's Hawk	Accipiter cooperii	WL	SDC Group I	A resident of riparian deciduous habitats and oak woodlands but in recent times has become adapted to urban park environments.	Not detected, Suitable foraging habitat occurs onsite.
Red-shouldered Hawk	Buteo lineatus	None	SDC Group I	Inhabits forests with open understory, especially bottomland hardwoods, riparian areas, and flooded swamps for nesting and foraging.	Not detected, Suitable foraging habitat occurs onsite.
Ferruginous Hawk	Buteo regalis	WL	SDC Group I	An uncommon winter migrant in San Diego County, typically in areas of grassland, sagebrush flats, desert scrub, low foothills, and pinyon-juniper habitats, preferring open grasslands for foraging.	Not detected, Suitable foraging habitat occurs onsite.
Golden Eagle	Aquila chrysaetos	CFP, WL	SDC Group I	Occurs within mountainous canyon land, rimrock terrain of open desert and grassland habitats primarily using open grasslands, oak savanna, oak woodland, and open shrublands for nesting. This species will primarily build nest sites on rocky cliffs or in trees but is also known to utilize human-made structures such as windmills, observation towers, and electrical transmission towers.	Not detected, Suitable foraging habitat occurs onsite.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Prairie Falcon	Falco mexicanus	WL	SDC Group I	Associated with open grasslands and scrublands with cliffs and steep terrain for nesting substrate. Foraging habitat for this species consists primarily of grasslands and other open habitats.	Not detected, Suitable foraging habitat occurs onsite.
California Gull	Larus californicus	WL	SDC Group II	Breeding colonies range from sea level to 9,000 feet elevation and are usually surrounded by water to prevent nest predation. Often forage up to 40 miles away from the breeding colony in open areas including farm fields, garbage dumps, meadows, scrublands, yards, and in agricultural areas.	Not detected, Suitable foraging habitat occurs onsite.
Yellow-billed Cuckoo	Coccyzus americanus	FT, SE	SDC Group I	Requires large, dense tracts of riparian woodland with well-developed understories. Restricted to riparian habitats along slow-moving waterways during breeding season.	Not detected, suitable habitat does not occur on site.
Barn Owl	Tyto alba	None	SDC Group II	Species tolerant to urban development and will nest in buildings, nest boxes, at the base of the leaves in palm trees, and in cavities in native trees. Utilizing open areas for foraging such as grasslands and agricultural fields.	Not detected, Suitable foraging habitat occurs onsite.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Burrowing Owl	Athene cunicularia	CSC	SDC Group I	Prairies, grasslands, lowland scrub, agricultural lands, coastal dunes, desert floors, and some artificial, open areas. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows and friable soils. They use rodent or other burrows for roosting and nesting cover and are also known to use pipes, culverts, and nest boxes where burrows are scarce.	Not detected, suitable (moderate) habitat does occur on site.
Long-eared Owl	Asio otus	CSC	SDC Group I	Rare residents of oak woodlands and broad riparian forests. Ideal nesting habitat has a closed canopy and open lands adjacent for foraging.	Not detected, suitable habitat does not occur on site.
Southwestern Willow Flycatcher	Empidonax traillii extimus	FE, SE	SDC Group I	Breeds in riparian woodlands with multi -storied canopy along rivers, streams, or other wetlands. Nesting typically occurs within close proximity of water or very saturated soil.	Not detected, suitable habitat does not occur on site.
Loggerhead Shrike	Lanius ludovicianus	CSC	SDC Group I	Breed and forage in shrublands, open sage scrub, chaparral, desert scrub or open woodlands with a grassland understory and areas of bare ground.	Not detected, Suitable foraging habitat occurs onsite.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Least Bell's Vireo	Vireo bellii pusillus	FE, SE	SDC Group I, NE	Breed and forage in riparian habitat either near water or in dry portions of river bottoms; nests along margins of bushes and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons.	Not detected, suitable habitat does not occur on site.
Horned Lark	Eremophila alpestris	WL	SDC Group II	Breed and forage in bare ground and grassland habitat with sparse vegetation cover. Species avoid habitat where grasses are more then several inches tall. Frequents recently disturbed or cleared habitat where seeds and insects are easy to find.	Not detected, moderate potential to occur onsite.
California Gnatcatcher	Polioptila californica californica	FT, CSC	SDC Group I	Breed and forage in scrub dominated plant communities, strongly associated with coastal scrub, sage scrub, and coastal succulent scrub communities. Distribution ranges from southern Ventura County down through Los Angeles, Orange, Riverside, San Bernadino and San Diego counties.	Not detected, suitable habitat does not occur on site.
Western Bluebird	Sialia mexicana	None	SDC Group II	Breeds and forages in open coniferous and deciduous woodlands, wooded riparian areas, grasslands, farmlands, and edge and burned areas. Nests in cavities.	Detected onsite foraging within non-native grassland. No nesting activity observed.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Yellow Warbler	Setophaga petechia	CSC	SDC Group II	Breeds and forages within riparian vegetation in close proximity to water along streams and in wet meadows.	Not detected, suitable habitat does not occur on site.
Yellow-breasted Chat	Icteria virens	CSC	SDC Group I	Nest in early-successional riparian habitats with a well-developed shrub layer and an open canopy. Restricted to narrow border of streams, creeks, sloughs and rivers.  Often nest in dense thicket plants such as blackberry and willow.	Not detected, suitable habitat does not occur on site.
Southern California Rufous-crowned Sparrow	Aimophila ruficeps canescens	None	SDC Group I	Breed and forage in chaparral, coastal sage scrub and coastal bluff scrub, especially in recently burned areas.  Prefers sparsely vegetated scrubland on hillsides and canyons from 197-4,593 ft. for breeding.	Not detected, suitable habitat does not occur on site.
Bell's Sage Sparrow	Artemisiospiza belli belli	WL	SDC Group I	Found in chaparral and coastal sage scrub in southern California and Baja California. This mostly ground-dwelling species prefers open chaparral and sage scrub and is one of the first species to inhabit recently burned habitat.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Grasshopper Sparrow	Ammo ramus savannarum	CSC	SDC Group I	Frequents dense, dry or well-drained grassland, especially native structurally diverse grassland with a mix of grasses and forbs for foraging and nesting. Uses scattered shrubs for singing perches.	Not detected, suitable habitat does not occur on site. Grasslands onsite do not contain structural diversity to support this species.
Summer Tanager	Piranga rubra	CSC	SDC Group II	Breed primarily in mature riparian woodland with extensive cottonwood canopy, some records of orchard nesting. Prefers tall, shady trees for nesting substrate.	Not detected, suitable habitat does not occur on site.
Tricolored Blackbird	Agelaius tricolor	CCE, CSC	SDC Group I	Preferred nesting habitat includes dense stands of cattails, bulrushes, or Himalayan blackberry with access to open water. Breeds locally in northeastern California. In winter, becomes more widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Mammals					
California Leaf- nosed Bat	Macrotus californicus	CSC, WBWG:H	SDC Group II	Roosts are in deep tunnels or caves, occasionally in buildings or bridges.	Not detected, suitable habitat does not occur on site.
Mexican Long- tongued Bat	Choeronycteris mexicana	CSC, WBWG:H	SDC Group II	Occurs in a wide variety of habitats, from arid thorn scrub to tropical deciduous forest and mixed oak-conifer forest. Preferred roosting sites include mines, caves, and rock fissures. Found primarily in moist desert canyons.	Not detected, suitable habitat does not occur on site.
Small-footed Myotis	Myotis ciliolabrum	WBWG:M	SDC Group II	Found throughout most of western North America, from southwestern Canada south into Mexico. There is not much information on the habitat requirements of this species, but it has been documented under rock slabs and in crevices, mine tunnels, under loose tree bark, and in buildings.	Not detected, suitable habitat does not occur on site.
Long-eared Myotis	Myotis evotis	WBWG:M	SDC Group II	Brush, woodland and forest habitats from sea level to 9000 ft. Lives in coniferous forests in mountain areas, roosts in small colonies in caves, buildings and under tree bark.	Not detected, suitable habitat does not occur on site.
Fringed Myotis	Myotis thysanodes	WBWG:H	SDC Group II	Widespread in California, occurring in all but the Central Valley and Colorado and Mojave Deserts. Optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer, generally at 4,000-7,000 ft.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Long-legged Myotis	Myotis volans	WBWG:H	SDC Group II	Likes forested mountainous areas, sometimes desert lowlands. Roosts in tree hollows and under bark, in crevices and buildings.	Not detected, suitable habitat does not occur on site.
Yuma Myotis	Myotis yumanensis	WBWG:LM	SDC Group II	Open forests and woodlands with sources of open water for foraging.	Not detected, suitable habitat does not occur on site.
Western Red Bat	Lasiurus blossevillii	CSC, WBWG:H	SDC Group II	Roosting habitat includes forests and woodlands, often in edge habitats adjacent to streams, fields, or urban areas. Usually among dense foliage, in forests and wooded areas, making long migrations from the northern latitudes to warmer climes for winter, sometimes hibernates in tree hollows or woodpecker holes.	Not detected, suitable habitat does not occur on site.
Spotted Bat	Euderma maculatum	CSC, WBWG:H	SDC Group II	Inhabits in foothills, mountains and desert regions of Southern California within desert, grassland, and mixed conifer forest. Roosts in rock crevices, caves, and cliffs.	Not detected, suitable habitat does not occur on site.
Townsend's Big- eared Bat	Corynorhinus townsendii	CSC, WBWG:H	SDC Group II	Cave-dwelling, also roosts in old mine-workings, occasionally found in buildings. Population concentrations in areas with cavity-forming rock and in old mining districts.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	PTO
Pallid Bat	Antrozous pallidus	CSC, WBWG:H	SDC Group II	Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings.	Not detected, suitable habitat does not occur on site.
Pocketed Free- tailed Bat	Nyctinomops femorosaccus	CSC, WBWG:M	SDC Group II	Associated with creosote scrub or chaparral, and large rock features such as large boulder piles or rocky canyons. Colonial and roosts primarily in crevices of rugged cliffs, high rocky outcrops and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests. The species may also roost in buildings, caves, and under roof tiles.	Not detected, suitable habitat does not occur on site.
Big Free-tailed Bat	Nyctinomops macrotis	CSC, WBWG:MH	SDC Group II	Inhabits rock crevices in canyon settings in arid, high relief landscapes. Mainly an inhabitant of rugged, rocky habitats in arid landscapes. It has been found in a variety of lowland plant associations, including desert shrub, woodlands, and evergreen forests. Roosts mainly in the crevices of rocks in cliff situations, although there is some documentation of roosting in buildings, caves, and tree cavities.	Not detected, suitable habitat does not occur on site.
Western Mastiff Bat	Eumops perotis	CSC, WBWG:H	SDC Group II	Inhabits open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. Roosts in crevices on vertical cliff faces, high buildings, trees, and tunnels.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	PTO
Black-tailed Jackrabbit	Lepus californicus	CSC	SDC Group II	Found in herbaceous and desert-shrub areas and open, early stages of forest and chaparral habitats. Mostly found on the coastal side of local San Diego County mountains in open habitats, usually avoiding dense stands of chaparral or woodlands.	Not detected, suitable habitat does not occur on site.
Los Angeles Little Pocket Mouse	Perognathus Iongimembris brevinasus	CSC	SDC Group II	Prefers low elevation grasslands, alluvial sage scrub, and coastal sage scrub. Inhabits areas of open ground, prefers fine sandy soils (for burrowing) but is also found commonly on gravel washes and on stony soils, within brush and woodland habitats. It is rarely found on sites with a high cover of rocks. Elevation range for species extends from near sea level to at least 5,600 ft.	Not detected, suitable habitat does not occur on site.
Dulzura Pocket Mouse	Chaetodipus californicus femoralis	CSC	SDC Group II	Variety of habitats including coastal and montane regions on chaparral slopes, grassland and coastal sage scrub.	Not detected, suitable habitat does not occur on site.
Northwestern San Diego Pocket Mouse	Chaetodipus fallax fallax	CSC	SDC Group II	Sandy herbaceous areas in coastal scrub, chaparral, sagebrush, deserts scrub and washes, and annual grassland.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	PTO
Stephens' Kangaroo Rat	Dipodomys stephensi	FE, ST	SDC Group I	Often found in grassland and coastal sage scrub ecotone where perennial vegetation is covering less than 50% of the ground, including disturbed areas. Deep, friable soil is needed for burrowing. Plants commonly associated with suitable habitat are chamise, buckwheat, brome grass and filaree.	Not detected. Closest known location is approximately 7 miles east of project site. The project site and specifically Valley Center is outside the current known range of this species.
Southern Grasshopper Mouse	Onychomys torridus ramona	CSC	SDC Group II	Common in California in arid desert habitats of the Mojave Desert and southern Central Valley including alkaline desert scrub and desert scrub. Lower population densities in succulent shrub, grassland, wash and riparian areas.	Not detected, due to the disturbed nature of the site this species is considered to have a low potential to occur onsite.
San Diego Desert Woodrat	Neotoma lepida intermedia	CSC	SDC Group II	Common to abundant in Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. Also found in a variety of other habitats. Moderate to dense canopies preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes. Elevational range from sea level to 8500 ft.	Not detected, suitable habitat does not occur on site.

Common Name	Scientific Name	Special Status	County	Habitat Requirements	РТО
Ringtail	Bassariscus astutus	None	SDC Group II	Usually not found more than 1 km (0.6 mi) from permanent water. Suitable habitat consists of a mixture of forest and shrubland in close association with rocky areas or riparian habitats. Forages on ground, among rocks, in trees; usually near water.	Not detected, suitable habitat does not occur on site.
American Badger	Taxidea taxus	CSC	SDC Group II	Inhabit a diversity of habitats with principal requirements of sufficient food, friable soils, and relatively open, uncultivated ground. Grasslands, savannas, and mountain meadows near timberline are preferred.	Not detected, suitable habitat does not occur on site.
Mountain Lion	Puma concolor	None	SDC Group II	Prefers rocky areas, cliffs, and ledges that provide cover within open woodlands and chaparral.	Not detected, suitable habitat does not occur on site.
Southern Mule Deer	Odocoileus hemionus	None	SDC Group II	Common across the western U.S. in a variety of habitats from forest edges to mountains and foothills.	Not detected, due to the disturbed nature of the site this species is considered to have a low potential to occur onsite.